



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

HC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/240,975	01/29/99	MITSUISHI	N HIT-2-010-1-

BEALL LAW OFFICES
104 EAST HUME AVENUE
ALEXANDRIA VA 22301-2518

LM12/0518

EXAMINER

BRAGDON, R

ART UNIT	PAPER NUMBER
----------	--------------

2751

8

DATE MAILED: 05/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/240,975

Applicant(s)
Mitsulshi

Examiner
Reginald Bragdon

Group Art Unit
2751



☒ Responsive to communication(s) filed on Jan 29, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 21-30 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 21-30 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Jan 29, 1999 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☒ received in Application No. (Series Code/Serial Number) 07/029,750.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2751

DETAILED ACTION

1. Claims 21-30 are pending in the application.
2. The Examiner wishes to thank Applicant's representative, Daniel J. Stanger (#32,846), for his assistance in obtaining documents from the parent application, 07/344,455, which is unavailable to the Examiner at this time.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 07/029,750, filed on 3-24-87.

Information Disclosure Statement

4. The Information Disclosure Statement filed 1-29-99 has been considered except as noted below.
5. Documents AV, AX, AY, and BK have not been considered because the IDS does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent/reference listed that is not in the English language. The references have been placed in the application file, but the information referred to therein has not been considered.

Art Unit: 2751

6. Related U.S. Patents 5,313,650 and 5,261,110, indicated by Applicant as being related applications have been reviewed by the Examiner. Patent application 07/088,960 was abandoned in favor of FWC application 07/418,901, which is now patent 5,261,110.

Drawings

7. The drawings have been objected to by the Office Draftsperson under 37 CFR 1.84 or 1.152 as noted in the attached PTO-948.

8. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 1-29-99 have been approved by the Examiner.

Claim Objections

9. Claims 24-27 are objected to because of the following informalities: in claim 24, line 2, -- (ROM)-- should be added after "memory".

All dependent claims are objected to as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2751

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 21-22, 24-25, and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ugon (4,382,279).

As per claims 21, 24, and 28-30, Ugon teaches a microprocessor architecture including an EPROM 101 (see figure 2, section M2, and column 6, lines 10-11), a ROM section ("a memory"; see figure 2, section M1, and column 6, lines 5-8), and a processing and control unit 104 ("CPU"; see figures 1-2). Evolving or modifiable data or instructions, including a processing program, are stored in the section M2 ("an [EPROM] which has a first region to store a user program...and a second region to store data", where individual addresses within the M2 section represent "regions"; see column 5, lines 24-26 and column 6, lines 4-5). The section M1 contains a subprogram "PROG" ("write control program" or "second program") which performs the functions required for writing to the memory. See column 6, lines 63-66. The M1 and M2 sections are inherently located at mutually different address positions.

A main program running includes an instruction, CALL PROG, which calls or jumps to the PROG subroutine. See column 7, lines 55-65. The subroutine includes a return instruction, RET, which causes the subroutine to be exited and control returned to the main program. See column 7, lines 34-54, in particular line 54.

As per claims 22 and 25, Ugon teaches that the subroutine "PROG" is located in ROM memory. See column 6, lines 5-8 and 63-66.

Art Unit: 2751

As per claims 27, Ugon teaches that subroutine "PROG" performs the functions required for writing to the memory. See column 6, lines 63-66.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ugon.

Ugon does not teach that the "memory" set forth as section M1 is a random access memory (RAM) or that the subroutine "PROG" is copied to the RAM for execution. It would have been obvious to one of ordinary skill in the art to have replaced the memory set forth as section M1 with a RAM and to copy the subroutine "PROG" from the EPROM to the RAM because removing the ROM would reduce the cost of manufacture by having to create only one memory (i.e. EPROM) storing the running program and the subroutine instead of two memories (i.e. EPROM and ROM) each storing different programs while utilizing the RAM (as a "shadow memory") would provide fast access to the subroutine program when modifying the EPROM.

Conclusion

14. **Any response to this action should be mailed to:**

Art Unit: 2751

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications intended for entry)

Or:

(703) 305-9731 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald G. Bragdon whose telephone number is (703) 305-3823. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and every other Friday from 7:00 AM to 3:30 PM.

The examiner's supervisor, Eddie Chan, can be reached at (703) 305-9712.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RGB
May 17, 2000

Reginald G. Bragdon

Reginald G. Bragdon
Primary Patent Examiner
Art Unit 2751